



parkinsonsutility.ST25.txt
SEQUENCE LISTING

<110> St. Jude Children's Research Hospital
University of Tennessee Research Corporation
Smeyne, Richard J.
Tharp, Ruby
Smeyne, Michelle
Williams, Robert

<120> Method for Determining Sensitivity to Environmental Toxins and
Susceptibility to Parkinson's Disease

<130> 023868.43877

<140> US 10/734,372

<141> 2003-12-12

<150> 60/433,437

<151> 2002-12-13

<160> 71

<170> PatentIn version 3.2

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<213> Mus sp.

<400> 1

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parkinsonsutility.ST25.txt

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<223> GST mu(chr1) 3' primer

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<222> (1)..(20)

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<212> DNA

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ggcagctccc caagtccag gacggagacc tcaccctgta ccagtccaat accatcctgc 240

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actatgaggc gggcaaggat gactatgtga aggcactgcc cgggcaactg aagccttttg 420

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aggccttcct ggcctcccct gagtacgtga acctcccat caatggcaac gggaaacagt 660

parkinsonsutility.ST25.txt

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aaatttctaa gagagct 737

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<222> (1)..(20)
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parkinsonsutility.ST25.txt

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<210> 34
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parkinsonsutility.ST25.txt

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<213> Homo sapiens

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parkinsonsutility.ST25.txt

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23

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 <212> DNA
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parkinsonsutility.ST25.txt

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gaatgtctag taaatgactc tcctctgagc tgtaataaat aaaatggtag taatgaatgc 1260
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<223> Not a naturally occurring sequence

<220>
<221> misc_feature
<222> (1)..(22)
<223> Reverse Primer

<400> 46
gcttcggggtc tgtaccaact tc 22

<210> 47
<211> 26
<212> DNA
<213> Artificial sequence

<220>
<223> Not a naturally occurring sequence

<220>
<221> misc_feature
<222> (1)..(26)
<223> TaqMan Probe

<400> 47
aagtgcccat gggtgaaatt gacggg 26

parkinsonsutility.ST25.txt

<210> 48
 <211> 1161
 <212> DNA
 <213> Homo sapiens

<400> 48
 ctctgagccc tgctcggttt aggcctgtct gcggaatccg caccaaccag caccatgccc 60
 atgatactgg ggtactggga catccgcggg ctggcccacg ccatccgcct gtccttgaa 120
 tacacagact caagctatga ggaaaagaag tacacgatgg gggacgctcc tgattatgac 180
 agaagccagt ggctgaatga aaaattcaag ctgggccttg actttcccaa tctgccctac 240
 ttgattgatg gggctcacia gatcaccag agcaacgcca tcttggtgta cattgcccgc 300
 aagcacaacc tgtgtgggga gacagaagag gagaagattc gtgtggacat tttggagaac 360
 cagaccatgg acaaccatat gcagctgggc atgatctgct acaatccaga atttgagaaa 420
 ctgaagccaa agtacttgga ggaactccct gaaaagctaa agctctactc agagtttctg 480
 gggaagcggc catggtttgc aggaacaag atcacttttg tagattttct cgtctatgat 540
 gtccttgacc tccaccgtat atttgagccc aagtgccttg acgccttccc aaatctgaag 600
 gacttcatct cccgctttga gggcttgag aagatctctg cctacatgaa gtccagccgc 660
 ttcctcccaa gacctgtgtt ctcaaagatg gctgtctggg gcaacaagta gggccttgaa 720
 ggccaggagg tgggagtga gagcccatc tcagcctgct gccaggctg tgcagcgag 780
 ctggactctg catcccagca cctgcctcct cgttccttc tcctgtttat tccatcttt 840
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 gcactaaagc cagcctgacc ttccttcctg ttagtggttg tgtctgcttt aaagggcctg 1020
 cctggccctc cgctgtgga gctcagcccc gagctgtccc cgtgttgcat gaaggagcag 1080
 cattgactgg ttacaggcc ctgctcctgc agcatggtcc ctgccttagg cctacctgat 1140
 ggaagtaaag cctcaaccac a 1161

<210> 49
 <211> 20
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Not a naturally occurring sequence

<220>
 <221> misc_feature
 <222> (1)..(20)
 <223> Forward Primer

<400> 49
 gccctttgaa gcctcagcta

parkinsonsutility.ST25.txt

<210> 50
 <211> 23
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Not a naturally occurring sequence

<220>
 <221> misc_feature
 <222> (1)..(23)
 <223> Reverse Primer

<400> 50
 tttagtgcag ggaagggtaa tga

23

<210> 51
 <211> 27
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Not a naturally occurring sequence

<220>
 <221> misc_feature
 <222> (1)..(27)
 <223> TaqMan Probe

<400> 51
 ccactatcct tcgtgaacat cccctcc

27

<210> 52
 <211> 1050
 <212> DNA
 <213> Homo sapiens

<400> 52
 ctctgagccc tgctcggttt aggcctgtct gcggaatccg caccaaccag caccatgccc 60
 atgatactgg ggtactggga catccgcggg ctggcccacg ccatccgcct gctcctggaa 120
 tacacagact caagctatga ggaaaagaag tacacgatgg gggacgctcc tgattatgac 180
 agaagccagt ggctgaatga aaaattcaag ctgggcctgg actttcccaa tctgccctac 240
 ttgattgatg gggctcacia gatcaccag agcaacgcca tcttggtgcta cattgcccgc 300
 aagcacaacc tgtgtgggga gacagaagag gagaagattc gtgtggacat tttggagaac 360
 cagaccatgg acaaccatat gcagctgggc atgatctgct acaatccaga atttgagaaa 420
 ctgaagccaa agtacttggg ggaactccct gaaaagctaa agctctactc agagtttctg 480
 gggaagcggc catggtttgc aggaacaag ggcttgagga agatctctgc ctacatgaag 540
 tccagccgct tcctcccaag acctgtgttc tcaaagatgg ctgtctgggg caacaagtag 600

parkinsonsutility.ST25.txt

ggccttgaag gccaggaggt gggagtgagg agcccatact cagcctgctg cccaggctgt	660
gcagcgcagc tggactctgc atcccagcac ctgcctcctc gttcctttct cctgtttatt	720
cccattcttta ctccaagac ttcatgtgcc ctcttcactc cccctaaacc cctgtcccat	780
gcaggccctt tgaagcctca gctaccact atccttcgtg aacatcccct cccatcatta	840
cccttccttg cactaaagcc agcctgacct tccttcctgt tagtggttgt gtctgcttta	900
aagggcctgc ctggccctc gcctgtggag ctcagccccg agctgtcccc gtgttgcag	960
aaggagcagc attgactggt ttacaggccc tgctcctgca gcatgggtccc tgccttaggc	1020
ctacctgatg gaagtaaagc ctcaaccaca	1050

<210> 53
 <211> 20
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Not a naturally occurring sequence

<220>
 <221> misc_feature
 <222> (1)..(20)
 <223> Forward Primer

<400> 53	
tttaggcctg tctgcggaat	20

<210> 54
 <211> 23
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Not a naturally occurring sequence

<220>
 <221> misc_feature
 <222> (1)..(23)
 <223> Reverse Primer

<400> 54	
gatgtcccag taccccagta tca	23

<210> 55
 <211> 21
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Not a naturally occurring sequence

parkinsonsutility.ST25.txt

<220>
<221> misc_feature
<222> (1)..(21)
<223> TaqMan Probe

<400> 55
cgcaccaacc agcaccatgc c

21

<210> 56
<211> 1572
<212> DNA
<213> Homo sapiens

<400> 56
ggttggttct gagaaggctt caaggaatag gcagacattt cagcaaggct gctgaggaag 60
gataggctgt ggaaattagg atgcagcact cctgcccggg tcccgcctcg gggtcgccag 120
gccctgaacc ccaacgccgg cattagtcgc gcctgcgcac ggccctgtgg agccgcggag 180
gcaagggacg gagaacgggg cggaggcgga gtcagggcgc ccgcgcgtgg gccccgcccc 240
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gcccgtcacc atgtcgtgcg agtcgtctat ggttctcggg tactgggata ttcgtgggct 360
ggcgcacgcc atccgcctgc tcctggagtt cacggatacc tcttatgagg agaaacggta 420
cacgtgcggg gaagctcctg actatgatcg aagccaatgg ctggatgtga aattcaagct 480
agacctggac tttcctaata tgccctacct cctggatggg aagaacaaga tcaccagag 540
caatgccatc ttgcgtaca tcgctcgcaa gcacaacatg tgtggtgaga ctgaagaaga 600
aaagattcga gtggacatca tagagaacca agtaatggat ttccgcacac aactgataag 660
gctctgttac agctctgacc acgaaaaact gaagcctcag tacttggaag agctacctgg 720
acaactgaaa caattctcca tgtttctggg gaaattctca tggtttgccg gggaaaagct 780
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aatcgctgcc tacttacagt ctgatcagtt ctgcaagatg cccatcaaca acaagatggc 960
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gattgcacag ttggagagag cagggtgtgtt aaatgggact ggagtccctg tgaagactgg 1320
gtgaggataa cacaagtaaa actgtggtac tgatggactt aaccggagtt cggaaccgt 1380
cctgtgtaca catgggagtt tagtgtgata aaggcagtat ttcagactgg tgggctagcc 1440

parkinsonsutility.ST25.txt

aatagagttg ggacaattgc ttactcatta aaaataatag agccccactt gacactattc 1500
 actaaaatta atctggaatt taaggcccaa cattaaacac aaagctgttg aaataaaaaa 1560
 aaaaaaaaaa aa 1572

<210> 57
 <211> 19
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Not a naturally occurring sequence

<220>
 <221> misc_feature
 <222> (1)..(19)
 <223> Forward Primer

<400> 57
 cgctgcgata ctggcattt 19

<210> 58
 <211> 18
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Not a naturally occurring sequence

<220>
 <221> misc_feature
 <222> (1)..(18)
 <223> Reverse Primer

<400> 58
 gggcttgggc atgaacct 18

<210> 59
 <211> 28
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Not a naturally occurring sequence

<220>
 <221> misc_feature
 <222> (1)..(28)
 <223> TaqMan Probe

<400> 59
 cctactcccc aactgagttc aagggctg 28

<210> 60
 <211> 1436

parkinsonsutility.ST25.txt

<212> DNA
<213> Homo sapiens

<400> 60
ggcgaggccg agcccctcct agtgcttccg gaccttgctc cctgaacact cggaggtggc 60
ggtggatctt actccttcca gccagtgagg atccagcaac ctgctccgtg cctcccgcgc 120
ctgttggttg gaagtgacga ccttgaagat cggccggttg gaagtgacga ccttgaagat 180
cggcgggccc agcggggccc agggggcggg tctggcgcta ggtccagccc ctgctgtccg 240
ggaacccag aggaggtcgc agttcagccc agctgaggcc tgtctgcaga atcgacacca 300
accagcatca tgtccatgac actgggggtac tgggacatcc gcgggctggc ccacgccatc 360
cgcctgctcc tggaatacac agactcaagc tacgaggaaa agaagtatac gatggggggac 420
gtcctgact atgacagaag ccagtggctg aatgaaaaat tcaagctggg cctggacttt 480
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ttgcatgaca gcattgactg gtttacaggc cctgctcctg cagcatggcc cctgccttag 1380
gcctacctga tcaaaataaa gcctcagcca caaaaaaaaaa aaaaaaaaaa aaaaaa 1436

<210> 61
<211> 18
<212> DNA
<213> Artificial sequence

<220>
<223> Not a naturally occurring sequence

<220>

parkinsonsutility.ST25.txt

```
<221> misc_feature
<222> (1)..(18)
<223> Forward Primer
```

<400> 61
gcagcgcagc tggactct

18

<210>	62
<211>	26
<212>	DNA
<213>	Artificial sequence

```
<220>
<223> Not a naturally occurring sequence
```

```
<220>
<221> misc_feature
<222> (1)..(26)
<223> Reverse Primer
```

<400> 62
ggtaaagatg ggaataaaca ggagaa

26

<210>	63
<211>	24
<212>	DNA
<213>	Artificial sequence

<220>
<223> Not a naturally occurring sequence

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<220>
<221> misc_feature
<222> (1)..(24)
<223> TaqMan Probe
```

<400> 63
atcccagcac ctgcctcctc gttc

24

```
<210> 64
<211> 1567
<212> DNA
<213> Homo sapiens
```

<400> 64							
tcctgggcct	ctcaaagtct	gagccccgct	ccgctgatgc	ctgtctgcag	aatccgcacc		60
aaccagcacc	atgcccatga	ctctggggta	ctgggacatc	cgtagggctgg	cccacgccat		120
ccgcttgctc	ctggaataca	cagactcaag	ctatgtggaa	aagaagtaca	cgctggggga		180
cgctcctgac	tatgacagaa	gccagtggct	gaatgaaaaa	ttcaagctgg	gcctggactt		240
tcccaatctg	ccctacttga	ttgatggggc	tcacaagatc	accagagca	atgccatcct		300
gcgctacatt	gcccgcgaagc	acaacctgtg	tggggagaca	gaagaggaga	agattcgtgt		360
ggacattttg	gagaaccagg	ttatggataa	ccacatggag	ctggctcagac	tgtgctatga		420

parkinsonsutility.ST25.txt

```

cccagatttt gagaaactga agccaaaata cttggaggaa ctccctgaaa agctaaagct 480
ctactcagag tttctgggga agcggccatg gtttgcagga gacaagatca cttttgtgga 540
tttccttgcc tatgatgtcc ttgacatgaa gcgtatattt gagcccaagt gcttggacgc 600
cttcctaaac ttgaaggact tcatctcccg ctttgagggt ttgaagaaga tctctgccta 660
catgaagtcc agccaattcc tccgaggctt tttgtttgga aagtcagcta catggaacag 720
caaatagggc ccagtgatgc cagaagatgg gagggaggag ccaaccttgc tgcctgcgac 780
cctggaggac agcctgactc cctggacctg ctttcttctt ttttcttctt ttctactctc 840
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tagacttccc tgatctagat atccttcgtc atgacacttc tcaataaaac gtatcccacc 1560
gtattgt 1567

```

```

<210> 65
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> Not a naturally occurring sequence

```

```

<220>
<221> misc_feature
<222> (1)..(20)
<223> Forward Primer

```

```

<400> 65
cagcaaatag ggcccagtga 20

```

```

<210> 66
<211> 16
<212> DNA

```


<213> Artificial sequence

<220>

<223> Not a naturally occurring sequence

<220>

<221> misc_feature

<222> (1)..(16)

<223> Reverse Primer

<400> 66

gggtcgcagg cagcaa

16

<210> 67

<211> 24

<212> DNA

<213> Artificial sequence

<220>

<223> Not a naturally occurring sequence

<220>

<221> misc_feature

<222> (1)..(24)

<223> TaqMan Probe

<400> 67

ccagaagatg ggagggagga gccca

24

<210> 68

<211> 793

<212> DNA

<213> Homarus gammarus

<400> 68

tgcgccacga tgtccgggga gtcagccagg agcttgggga agggaagcgc gcccccgggg 60

ccgggtcccg agggctcgat ccgcatctac agcatgaggt tctgcccgtt tgctgagagg 120

acgcgtctag tcctgaaggc caagggaatc aggcataag tcatcaatat caacctgaaa 180

aataagcctg agtggttctt taagaaaaat ccctttgggtc tgggtgccagt tctggaaaac 240

agtcagggtc agctgatcta cgagtctgcc atcacctgtg agtacctgga tgaagcatal 300

ccagggaaga agctgttgcc ggatgacccc tatgagaaag cttgccagaa gatgatctta 360

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actaataaga agacgacctt ctttggtggc aattctatct ctatgattga ttacctcatc 540

tggccctggt ttgaacggct ggaagcaatg aagttaaagt agtgtgtaga ccacactcca 600

aaactgaaac tgtggatggc agccatgaag gaagatccca cagtctcagc cctgcttact 660

agtgagaaag actggcaagg tttcctagag ctctacttac agaacagccc tgaggcctgt 720

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agtaaaaaaa aaa 793

<210> 69
 <211> 21
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Not a naturally occurring sequence

<220>
 <221> misc_feature
 <222> (1)..(21)
 <223> Forward Primer

<400> 69
 ccgcatctac agcatgaggt t 21

<210> 70
 <211> 20
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Not a naturally occurring sequence

<220>
 <221> misc_feature
 <222> (1)..(20)
 <223> Reverse Primer

<400> 70
 tcccttgcc ttcaggacta 20

<210> 71
 <211> 22
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Not a naturally occurring sequence

<220>
 <221> misc_feature
 <222> (1)..(22)
 <223> TaqMan Probe

<400> 71
 tgcccgtttg ctgagaggac gc 22